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10/753,970	01/08/2004	Shinichiro Kobayashi	9319S-000613	5673

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EXAMINER
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SOBUTKA, PHILIP

ART UNIT	PAPER NUMBER
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2618

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10/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/753,970

Applicant(s)

KOBAYASHI ET AL.

Examiner

Philip J. Sobutka

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 23 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-19 rejected under 35 U.S.C. 102(b) as being anticipated by Kenji (JP 200-278551).

Consider claim 1. Kenji teaches a method for building an information network via an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, the method comprising:

step (a) of selecting at least one frequency not used by television broadcasting or radio broadcasting in an area where the house is located (*Kenji abstract, lines 5-7, 17-21*);

step (b) of encoding transmission data (*Kenji abstract, lines 5-7, note that a data, i.e. digital signal, is necessarily a digital code*);

step (c) of generating a carrier wave having the frequency selected in step (a) (*Kenji abstract, lines 5-7, note that in modulating a data signal for transmission generation of a carrier wave is inherent*);

step (d) of modulating said carrier wave having the frequency selected in step using said encoded transmission data (*Kenji abstract, lines 5-7*);

step (e) of transmitting the modulated carrier wave via the antenna terminal or the antenna cable from a first information terminal (*Kenji abstract, lines 5-7*); and

step (f) of receiving the carrier wave transmitted in step (b) and demodulating the carrier wave to produce reception data received by a second information terminal (*Kenji abstract, lines 11-18*).

As to claim 2, Kenji teaches the method according to claim 1, wherein, in step (a), at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is selected (*Kenji abstract, lines 5-7, 17-21*).

As to claim 3, Kenji teaches the method according to claim 1, further comprising a step of bidirectionally transmitting data between the information network via the antenna terminal or the antenna cable and another network by converting the format of the data (*Kenji abstract, lines 11-18*).

Consider claim 4. Kenji teaches a method for building an information network via an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, the method comprising:

step (a) of selecting a first frequency and a second frequency not used by television broadcasting or radio broadcasting in an area where the house is located (*Kenji abstract, lines 5-7, 17-21*);

step (b) of encoding transmission data (*Kenji abstract, lines 5-7, note that a data, i.e. digital signal, is necessarily a digital code*);

step (c) of generating a carrier wave having the frequency selected in step (a) (*Kenji abstract, lines 5-7, note that in modulating a data signal for transmission generation of a carrier wave is inherent*);

step (d) of modulating said carrier wave having the frequency selected in step using said encoded transmission data from a first information terminal and transmitting the modulated carrier wave via the antenna terminal or the antenna cable (*Kenji abstract, lines 5-7*);

step (e) of receiving the carrier wave transmitted in step (b) and demodulating the carrier wave to produce reception data received by a second information terminal (*Kenji abstract, lines 11-18*);

step (f) of encoding transmission data (*Kenji abstract, lines 5-7, note that a data, i.e. digital signal, is necessarily a digital code*);

step (g) of generating another carrier wave having the second frequency selected in step (a) (*Kenji abstract, lines 11-18*);

step (h) of modulating said carrier wave having the second frequency by using said encoded transmission data transmitted from the second information terminal and transmitting the modulated carrier wave via the antenna terminal or the antenna cable (*Kenji abstract, lines 11-18*); and

step(i) of receiving the carrier wave transmitted in step (h) and demodulating the carrier wave to produce reception data received by the first information terminal (*Kenji abstract, lines 11-18*).

As to claim 5, Kenji teaches the method according to claim 4, wherein, in step (a), at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is selected (*Kenji abstract, lines 5-7, 17-21*).

As to claim 6, Kenji teaches the method according to claim 4, further comprising a step of bidirectionally transmitting data between the information network via the antenna terminal or the antenna cable and another network by converting the format of the data (*Kenji abstract, lines 11-18*).

Consider claim 7. Kenji teaches a method for building an information network via an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, the method comprising:

step (a) of selecting a plurality of frequencies not used by television broadcasting or radio broadcasting in an area where the house is located (*Kenji abstract, lines 5-7, 17-21*);

step (b) of dividing transmission data transmitted from a first information terminal into a plurality of channels (*Kenji abstract, lines 11-18, note that of course the data signals are separate and therefore divided from the TV signals*),

step (c) of encoding said transmission data (*Kenji abstract, lines 5-7, note that a data, i.e. digital signal, is necessarily a digital code*);

step (d) of generating a plurality of carrier waves having the respective frequencies selected in step (a) (*Kenji, figures, abstract, lines 5-7, note that a plurality*

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*of frequencies is modulated, note that in modulating a data signal for transmission generation of a carrier wave is inherent));*

step (e) of modulating said plurality of carrier waves having the respective frequencies selected in step (a) by using the encoded transmission data from the plurality of channels (*Kenji abstract, lines 5-7, note that a data, i.e. digital signal, is necessarily a digital code*); and

step (f) of transmitting the modulated carrier waves via the antenna terminal or the antenna cable (*Kenji abstract, lines 5-7,*); and

step (g) of receiving the carrier waves transmitted in step (f), demodulating the carrier waves to produce reception data over the plurality of channels, and integrating the reception data over the plurality of channels into a single data set which is received by a second information terminal. (*Kenji abstract, lines 11-18, note that the waves are integrated into a single coax*).

As to claim 8, Kenji teaches the method according to claim 7, wherein, in step (a), at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is selected (*Kenji abstract, lines 5-7, 17-21*).

As to claim 9, Kenji teaches the method according to claim 7, further comprising a step of bidirectionally transmitting data between the information network via the antenna terminal or the antenna cable and another network by converting the format of the data (*Kenji abstract, lines 11-18*).

Consider claim 10. Kenji teaches a network connection circuit for connecting an information terminal to an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, comprising:

frequency-selecting means for selecting at least one frequency not used by television broadcasting or radio broadcasting in an area where the house is located (*Kenji abstract, lines 5-7, 17-21*);

encoding means for encoding transmission data (*Kenji abstract, lines 5-7, 11-18 note that a data, i.e. digital signal, is necessarily a digital code*);

carrier generating means for generating a carrier wave having the frequency selected by the frequency-selecting means (*Kenji abstract, lines 5-7, note that in modulating a data signal for transmission generation of a carrier wave is inherent*);

modulating means for modulating said carrier wave using transmission data transmitted from the information terminal (*Kenji abstract, lines 5-7*); and

transmitting means for transmitting the modulated carrier wave via the antenna terminal or the antenna cable (*Kenji abstract, lines 11-18*).

As to claim 11, Kenji teaches the network connection circuit according to claim 11, wherein at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is automatically selected by the frequency-selecting means (*Kenji abstract, lines 5-7, 17-21*).



Consider claim 12. Kenji teaches a network connection circuit for connecting a first information terminal to an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, comprising:

frequency-selecting means for selecting at least one frequency not used by television broadcasting or radio broadcasting in an area where the house is located (*Kenji abstract, lines 5-7, 17-21*); and

receiving means for receiving a carrier wave which has the frequency selected by the frequency-selecting means and has been transmitted from a second information terminal via the antenna terminal or the antenna cable and

demodulating means for demodulating the carrier wave to produce a baseband signal (*Kenji abstract, lines 11-18*)

and decoding means for decoding said baseband signal to generate reception data received by the first information terminal (*note that if Kenji modulates data signals for transmission a demodulator is inherent in the receiver*).

As to claim 13, Kenji teaches the network connection circuit according to claim 12, wherein at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is automatically selected by the frequency-selecting means (*Kenji abstract, lines 5-7, 17-21*).

Consider claim 14. Kenji teaches a network connection circuit for connecting a first information terminal to an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, comprising:

frequency-selecting means for selecting a first frequency and a second frequency not used by television broadcasting or radio broadcasting in an area where the house is located (*Kenji abstract, lines 5-7,17-21*);

encoding means for encoding transmission data transmitted from the first information terminal (*Kenji abstract, lines 5-7,11-18 note that a data, i.e. digital signal, is necessarily a digital code*);

carrier generating means for generating a carrier wave having the frequency selected by the frequency-selecting means (*note that a carrier generator is inherent in the arrangement of Kenji*);

modulating means for modulating said carrier wave using said encoded transmission data (*Kenji abstract, lines 5-7,11-18*);

transmitting means for transmitting the modulated carrier wave via the antenna terminal or the antenna cable (*Kenji abstract, lines 11-18*); and

receiving means for receiving a modulated carrier wave which has the second frequency and has been transmitted from a second information terminal via the antenna terminal or the antenna cable (*Kenji abstract, lines 11-18*) and

demodulating means for demodulating the carrier wave to produce a baseband signal (*note that if Kenji modulates data signals for transmission a demodulator is inherent in the receiver*) and

decoding means for decoding said baseband signal to generate reception data received by the first information terminal (*Kenji abstract, lines 11-18*).

As to claim 15, Kenji teaches the network connection circuit according to claim 14, wherein at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is automatically selected by the frequency-selecting means (*Kenji abstract, lines 5-7, 17-21*).

Consider claim 16. Kenji teaches a network connection circuit for connecting an information terminal to an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, comprising:

frequency-selecting means for selecting a plurality of frequencies not used by television broadcasting or radio broadcasting in an area where the house is located (*Kenji abstract, lines 5-7, 17-21*);

dividing means for dividing transmission data transmitted from the information terminal into a plurality of channels (*Kenji abstract, lines 11-18, note that of course the data signals are separate and therefore divided from the TV signals*),

encoding means for encoding said divided transmission data (*Kenji abstract, lines 5-7, note that a data, i.e. digital signal, is necessarily a digital code*);

modulating means for modulating a plurality of carrier waves having the respective frequencies selected by the frequency-selecting means by using the transmission data from the plurality of channels (*Kenji abstract, lines 11-18*), and

transmitting means for transmitting the modulated carrier waves via the antenna terminal or the antenna cable (*Kenji abstract, lines 11-18*).

As to claim 17, Kenji teaches the network connection circuit according to claim 16, wherein at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is automatically selected by the frequency-selecting means (*Kenji abstract, lines 5-7, 17-21*).

Consider claim 18. Kenji teaches a network connection circuit for connecting a first information terminal to an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, comprising:

frequency-selecting means for selecting a plurality of frequencies not used by television broadcasting or radio broadcasting in an area where the house is located (*Kenji abstract, lines 5-7, 17-21*); and

receiving means for receiving a plurality of carrier waves which have the respective frequencies selected by the frequency-selecting means and have been transmitted from a second information terminal via the antenna terminal or the antenna cable,

demodulating means for demodulating the carrier waves to produce a baseband signal (*note that if Kenji modulates data signals for transmission a demodulator is inherent in the receiver*);

decoding means for decoding said baseband signal to generate reception data over a plurality of channels , and

integrating means for integrating the reception data over the plurality of channels into a single data set which is received by the first information terminal (*Kenji abstract, lines 11-18*).

As to claim 19, Kenji teaches the network connection circuit according to claim 18, wherein at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is automatically selected by the frequency-selecting means (*Kenji abstract, lines 5-7, 17-21*).

20. The method according to claim 1 comprising: transmitting said modulated carrier wave from a first network circuit via a first antenna terminal; and

receiving said modulated carrier wave by a second network circuit via a second antenna terminal that is in direct communication with said first antenna terminal via a distributor (*Kenji see abstract lines 17-22*).

21. The method according to claim 1 comprising: transmitting said modulated carrier wave from a first antenna terminal to a distributor box; and receiving said modulated carrier wave by a second antenna terminal from said distributor box (*Kenji see abstract lines 17-22, note that the distributor housing would correspond to the claimed distributor box*).

22. The method according to claim 21 comprising: directly transmitting said modulated carrier wave from said first antenna terminal to said distributor box; and directly receiving said modulated carrier wave by said second antenna terminal from said distributor box (*Kenji see abstract lines 17-22, note that the distributor housing would correspond to the claimed distributor box*).

***Allowable Subject Matter***

3. Claims 23, 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Consider claim 23. The nearest prior art as shown in Kenji fails to teach the network connection circuit according to claim 10 comprising: first terminal tuning means for receiving a first carrier wave from a first terminal and for converting said carrier wave to an intermediate-frequency signal; intermediate frequency means for amplifying said intermediate-frequency signal; demodulating means for demodulating the amplified intermediate-frequency signal to generate a baseband signal; and synchronous separation means for separating a synchronous signal based on said baseband signal, wherein said frequency-selecting means selects said at least one frequency based on said synchronous signal.

**Response to Amendment**

4. Applicant's arguments filed August 14, 2007 have been fully considered but they are not persuasive.

5. Applicant argues that Kenji does not teach modulating a data signal onto a carrier wave for transmission. The examiner is unaware of any meaning to Kenji's disclosure other than that the data signal is being modulated onto a carrier wave. If applicant continues to argue that a signal can be modulated for transmission without using a carrier wave evidence of such is requested in the response. Otherwise it would be assumed that the disclosure has the conventional meaning. The rejections have been adjusted accordingly.

#### ***Conclusion***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J Sobutka whose telephone number is 571-272-7887. The examiner can normally be reached on Monday - Friday, 8:30am - 5:00pm.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177.

10. The central fax phone number for the Office is 571-273-8300.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number.

**CENTRALIZED DELIVERY POLICY:** For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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 10/26/07

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PATENT EXAMINER